other recorded cases of this kind, except one, the original inoculation wound was on the bridge of the nose. He reviews the chief facts of note in cephalic tetanus, and recapitulates briefly the other cases, seven in all, of facial diplegia in head tetanus that he has found in the literature. The peculiar fact that the same infection causes paralysis of one nerve while inducing tetanic spasm in others, is remarked, but can not be very well explained. Autopsy results, he states, are so far negative. The prognosis of head tetanus is a little better than in the usual type, but it is a grave disease with a very high mortality. Lloyd's patient came within the "chronic" group, the symptoms only appearing on the fourteenth day after the injury and she made a good recovery. The peculiarities of the case, it being the seventh or eighth thus far reported with diplegia, render it of special interest.

CENTRAL ATAXIA IN CHILDHOOD. A. W. Fairbanks (Journal A. M. A., Oct. 7).

The author discusses the condition occasionally observed in children characterized by muscular inco-ordination, delayed voluntary muscular action, unsteady gait, slow or hesitating speech, occasionally explosive, nystagmus, tremor, involuntary movements, choreiform or otherwise, deficient energy and later paralysis, muscular spasm and contractures. Other less characteristic symptoms are vertigo, headache, optic atrophy, pupillary anomalies, various mental and sensory symptoms, trophic changes in muscles and more rarely, sphincter weakness and cutaneous trophic changes. Some of these symtoms are later than the others, and may mask the earlier symtoms of the disease. Fairbanks thinks tendon reflex anomalies are simply a matter of duration or extent of the central lesion and not essential to the symtom complex. The variations from the original type of Friedreich are remarked, and the author refers to the cases reported by Everett Smith, Nonne, Menzel and Sanger Brown as most interesting and typical of the type here discussed. In the autopsies that have been made nearly all the subjects showed extreme degeneration of the posterior parts of the cord, and posterier nerve roots were more or less degenerated in all. In all but one case there was some atrophy of the medulla and cerebellum and atrophic changes in certain of the cranial nerves. The pathology of the condition is discussed, and he points out that the latest formed portions of the cord are the seat of greatest degeneration. He thinks that the defects indicate a process supervening on a developmental insufficiency, either of structure or inherent vitality of the nervous system. In Nonne's anomalous case there was general smallness of the entire nervous system without special signs of degeneration.

THE PSYCHOSES OF HEART DISEASE. W. House (Journal A. M. A., Oct. 28).

Dr. House calls attention the mental disturbances associated with cardiac disease, which, he thinks, have been rather neglected by authors of text books, the heart disease being regarded either as a complication of the insanity, or the organic symptoms predominating, they either overshadow the slight mental ones or so disable the patient that he can be readily cared for in the wards of a general hospital where psychic derangements are considered as only secondary and subordinate to his bodily ailment. In the severer cases this may do no harm, but in the slighter ones it is bad, as the mental disorder which should be attended to is likely to be overlooked. He recognizes four principal types, more or less shading into each other, as follows: 1. Panicky conditions alternating with some depression and irritability, without active delusions of hallucinations. In such cases the patient is usually terrified by the consciousness of cardiac sensation and irregularities. 2. Delusive symptoms based on misinterpretations of local cardiac phenomena, such as pain. 3. Active hallucinations and delusions from circulatory disturbances involving sensory organs. 4. Dementias from secondary lesions of the brain. Case histories illustrating the different types and the relation of the heart lesions to the mental symptoms are given. It is not contended that the heart disease was the sole cause in every case, but rather that it was the exciting cause, except wherein the cardiac troubles were rather the effect, and especial emphasis is given to the relationship of mental improvement to the treatment directed to the heart trouble. During a residence of nearly two years in a large State hospital the author observed but few of these cardio-mental cases, and the inference is that they are more often treated by the internist than by the alienist, and their psychic side has thus been minimized.

DEFECTS OF WILL FROM A MEDICAL STANDPOINT. H. T. Pershing (Journal A. M. A., Oct. 28).

The author defines volition practically as the idea of motion and locates its seat in the motor centres of the brain. The transformation of a sensation of motion into a memory and into the idea of its repetition and the cerebral mechanism involved is worked out by him in detail and practical deductions are drawn. The control of acts is best obtained, not by prohibitions that arouse the idea to be avoided, but rather by displacing it by something better. In hysterical paralysis, for example, the physicians should try to raise the emotional tone, then to excite the depressed sensory centres by electricity and passive motion, and then further to awaken the lost idea of motion by encouraging the patient to aid rhythmic passive motion by voluntary effort. The fundamental thing is to reawaken the lost sensations and ideas in the kinesthetic centre. This is the main idea in his article, but he elaborates it to apply to the various neurasthenic defects of will, as well as to morbid impulses or obsessions which are to be combated, giving also in a suggestive way the general principles of treatment adapted to the several types of disordered volition. CAMP (Philadelphia).

SURGICAL TREATMENT OF INTRASPINAL TUMORS. Richard H. Harte (Annals of Surgery, October, 1905).

Harte presents an analysis of 92 cases operated for spinal tumor. This series shows a mortality of 47 per cent, but if late deaths are deducted, this is reduced to 28 per cent. The high death rate should not deter surgeons to operate, since the results are markedly beneficial. In 88 of the cases the nature of the tumor was recorded as follows: Sarcoma, 37; adhesions, 11; echinococcus, 8; fibroma, 16; syringomyelia, 5; endothelioma, 4; psammoma, 3; cyst, 3; fibromyoma, 2; osteoma, 2; tumor of vertebra, 1; myeloma, 1; lipoma, 1; lymphangioma, 1; primary carcinoma, 1; secondary carcinoma, 1; and dermoid cyst, 1. Of the 49 patients who survived the operation 59 per cent were cured, 34 per cent were improved and 6 per cent unchanged in condition. The nature of the growth is practically impossible to determine prior to operation. Sarcomata can be diagnosed with certainty only when clearly secondary. It is usually stated that extradural tumors are more frequent and much less fatal than intradural growths. In this series 50 were extradural and 36 intradural, the mortality in the former being 50 per cent and in the latter 47.21 per cent. This may be due to the fact that sarcomata are more frequently extradural. The relative mortality in males and females is 45 and 57 per cent respectively, but again this may be influenced by the greater frequency of sarcomata in the male. Of 82 cases in which the region affected is noted the upper dorsal was involved in 33, the lower dorsal in 24, the lumbosacral in 14, and the cervical in 11. Of the cases in which the cause of death was recorded fully one-half died of shock and hemorrhage, or of infection and meningitis.

COWLES (New York).